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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,502	02/28/2002	Masahiro Tada	5225.0226-00	7466
22852	7590	05/20/2005		EXAMINER
				HASHEM, LISA
			ART UNIT	PAPER NUMBER
			2645	

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/084,502	TADA ET AL.	
	Examiner	Art Unit	
	Lisa Hashem	2645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 28 February 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-12 is/are rejected.
- 7) Claim(s) 1-12 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 28 February 2002 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements filed on 7-16-2002 and 3-20-2003 fail to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

Claim Objections

2. Intended Use Limitations: A recitation directed to the manner in which a claimed apparatus is intended to be used does not distinguish the claimed apparatus from the prior art – if the prior art has the capability to so perform (see MPEP 2114 and *Ex parte Masham*, 2 USPQ2d 1647 (1987). Thus the claim limitations in the examined claims 1-12 that employ phrases of type: "FOR" doing something, e.g. 'a radio communication device on a network for', 'a memory for', 'discriminating conditions for', 'a first module for', 'a method for controlling a communication device', etc. These are typical of claim limitations, which may not distinguish over the prior art. The references noted below have the structure and functions of performing the claimed limitations.

3. Claims 7 and 8 are objected to because of the following informalities: Claims 7 and 8 depend on one of claims 3 to 6. Examiner assumes that claims 7 and 8 depend on claim 4. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 4 recites the limitation "the designated communication controlling information".

There is insufficient antecedent basis for this limitation in the claim.

6. Claim 10 recites the limitation "the predetermined functions". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by U.S.

Patent Application Publication No. 2003/0078002 by Sanjeev et al, hereinafter Sanjeev.

Regarding claim 1, Sanjeev discloses a radio communication device or client device (e.g. printer, PDS, or wireless/cellular telephone) (Fig. 3, 304) on a network or wireless personal area network (WPAN) (Fig. 3, 300) for communicating with a target communication terminal or

remote device (e.g. a laptop) (Fig. 3, 302) on the network (section 0017, line 1 - section 0019, line 12), comprising: a memory (Fig. 3, 310) for storing service information so that predetermined functions can be performed over the network with the target communication terminal (section 0026, line 1 - section 0027, line 1-14; section 0029, lines 14); a judging module or Bluetooth protocol stack (Fig. 5, 500) for judging whether predetermined connection conditions with the target communication terminal are satisfied by repeating a target communication terminal discovery process before establishing radio communications with another target communication terminal (section 0030, line 1 – section 0036, line 8; section 0039, lines 16-20); and a communication control module or processor (Fig. 3, 308) for executing the predetermined functions with the target communication terminal by reading service information associated with the target communication terminal or service channel number (Fig. 3, 322) from the service information memory when the predetermined connection conditions are satisfied (section 0026, line 1 – section 0027, line 14; section 0037, lines 7-16).

Regarding claim 2, Sanjeev discloses a radio communication device or client device (e.g. printer, PDS, or wireless/cellular telephone) (Fig. 3, 304) on a network or wireless personal area network (WPAN) (Fig. 3, 300) for communicating with a target communication terminal or remote device (e.g. a laptop) (Fig. 3, 302) on the network (section 0017, line 1 - section 0019, line 12), comprising: a service information memory (Fig. 3, 310) for storing service information that corresponds to the target communication terminal so that predetermined functions can be performed with the target communication terminal over the network (section 0026, line 1 – section 0027, line 14; section 0029, lines 14); a judging module or Bluetooth protocol stack (Fig. 5, 500) for judging whether predetermined disconnection discriminating conditions are satisfied

by repeating a connection process with the target communication terminal before disconnecting radio communication with the target communication terminal (section 0030, line 1 – section 0036, line 8; section 0037, line 16 – section 0039, line 20); and a communication control module or processor (Fig. 3, 308) for invalidating the predetermined functions associated with the service information that corresponds to the target communication terminal or service channel number (Fig. 3, 322) and storing the service information in the service information memory when the predetermined disconnection discriminating conditions are satisfied (section 0026, line 1 – section 0027, line 14; section 0039, lines 11-20).

Regarding claim 3, Sanjeev discloses a radio communication device or client device (e.g. printer, PDS, or wireless/cellular telephone) (Fig. 3, 304) in a network or wireless personal area network (WPAN) (Fig. 3, 300) for communicating with a target communication terminal or remote device (e.g. a laptop) (Fig. 3, 302) in the network (section 0017, line 1 - section 0019, line 12), comprising: a service information memory (Fig. 3, 310) for storing service information so that predetermined functions can be performed with the target communication terminal (section 0026, line 1 – section 0027, line 14; section 0029, lines 14); and a communication control module or processor (Fig. 3, 308) for communicating with the target communication terminal by using the service information read out from the service information memory based on communication controlling information that defines discriminating conditions for establishing a new connection with the target communication terminal or disconnecting an existing connection with the target communication terminal (section 0026, line 1 – section 0027, line 14; section 0038, line 1 – section 0039, line 20).

Regarding claim 4, Sanjeev discloses a communication device or client device (e.g.

printer, PDS, or wireless/cellular telephone) (Fig. 3, 304), comprising: a radio communication module or transceiver (Fig. 3, 306) for exchanging data with a target communication terminal or remote device (e.g. a laptop) (Fig. 3, 302) over a network or wireless personal area network (WPAN) (Fig. 3, 300) (section 0017, line 1 - section 0019, line 12; section 0026, lines 1-4); a service information memory (Fig. 3, 310) for storing service information so that predetermined functions can be performed with the target communication terminal (section 0026, line 1 – section 0027, line 14; section 0029, lines 14); a communication control information designating module or Bluetooth protocol stack (Fig. 5, 500) for designating communication conditions for a newly established radio communication connection with the target communication terminal or for discriminating a disconnection of an existing radio communication connection with the target communication terminal (section 0030, line 1 – section 0036, line 8; section 0037, lines 16 – section 0039, line 20); a memory or link management protocol (Fig. 5, 511) for storing designated communication controlling information by the communication control information designating module (section 0033, lines 1-8); and a communication control module or processor (Fig. 3, 308) for determining whether the radio communication connection with the target communication terminal is in a connection status or a disconnection status based on the communication controlling information stored in the memory, and performing communication through the radio communication module by using service information read from the service information memory in accordance with the determination result (section 0026, line 1 – section 0027, line 14; section 0038, line 1 – section 0039, line 20).

Regarding claim 5, Sanjeev discloses a radio communication device or client device (e.g.

printer, PDS, or wireless/cellular telephone) (Fig. 3, 304) in a network or wireless personal area network (WPAN) (Fig. 3, 300) (section 0017, line 1 - section 0019, line 12) that exchanges service information with a target communication terminal or remote device (e.g. a laptop) (Fig. 3, 302) in the network for performing predetermined functions, the radio communication device comprising: a service memory (Fig. 3, 310) for storing the service information (section 0026, line 1 – section 0027, line 14; section 0029, lines 14); a temporary memory or connection data (Fig. 3, 318) for temporarily storing the service information used to establish communications with the target communication terminal (section 0039, lines 1-20); a first module or Bluetooth protocol stack (Fig. 5, 500) for transferring the service information from the service memory to the temporary memory when a radio communicating connection for the target communication terminal has been established, and for transferring the service information from the temporary memory to the service memory when the radio communication connection with target communication terminal has been disconnected based on communication controlling information used for discriminating between a newly established radio communication connection with the target communication terminal and a disconnection of an existing radio communication connection with the target communication terminal (section 0030, line 1 – section 0039, line 20); and a radio communication control or processor (Fig. 3, 308) for performing the predetermined functions with the target communication terminal when the service information is stored in the temporary memory (section 0026, line 1 – section 0027, line 14; section 0038, line 1 – section 0039, line 20).

Regarding claim 6, Sanjeev discloses a communication device or client device (e.g.

printer, PDS, or wireless/cellular telephone) (Fig. 3, 304), comprising: a radio communication module or transceiver (Fig. 3, 306) for exchanging data with a target communication terminal or remote device (e.g. a laptop) (Fig. 3, 302) through radio (section 0017, line 1 - section 0019, line 12; section 0026, lines 1-4); a service memory (Fig. 3, 310) for storing service information so that predetermined functions can be performed with the target communication terminal (section 0026, line 1 – section 0027, line 14; section 0029, lines 14); a temporary memory or connection data (Fig. 3, 318) for temporarily storing service information used in an established target communication terminal for communication (section 0028, lines 1-16; section 0039, lines 4-16); a designating module or Bluetooth protocol stack (Fig. 5, 500) for designating communication controlling information in order to define conditions for discriminating between a newly established radio communication connection with the target communication terminal or a disconnection of an existing radio communication connection with the target communication terminal (section 0030, line 1 – section 0039, line 20); a communication controlling information memory or link management protocol (Fig. 5, 511) for storing the communication controlling information designated by the designating module; a memory or link management protocol (Fig. 5, 511) for storing the communication controlling information designated by the designating module (section 0033, lines 1-8); a discriminating module or RFCOMM for determining whether a status of the radio communication connection with a target communication terminal is a connection status or a disconnection status based on the communication controlling information in the communication controlling information memory mechanism, and transferring the service information from the service memory to the temporary memory when the status of the radio communication connection with the target communication terminal is the connection status, and

transferring the service information from the temporary memory to the service memory when the status of the radio communication connection with the target communication terminal is the disconnection status (section 0038, line 1 – section 0039, line 20); and a radio communication control module or processor (Fig. 3, 308) for performing the predetermined functions with the target communication terminal when the service information is stored in the temporary memory (section 0026, line 1 – section 0027, line 14; section 0038, line 1 – section 0039, line 20).

Regarding claim 7, the communication device according to one of claim 4, wherein Sanjeev further discloses: the communication controlling information includes connection discriminating conditions based on the number of times a detecting command for detecting the target communication terminal issues during a predetermined period and disconnection discriminating conditions based on the number of times a confirming command for confirming the connection to the target communication terminal issues during the predetermined period (section 0038, line 1 – section 0039, line 20).

Regarding claim 8, the communication device according to one of claim 4, wherein Sanjeev further discloses: the communication controlling information includes connection and disconnection discriminating conditions that define a variation status of the radio communication connection for indicating a communication connection or a disconnection to the target communication terminal, the variation status is designated based on a power level of radio waves measured within the predetermined period (section 0038, line 1 – section 0039, line 20).

Regarding claim 9, Sanjeev discloses a method for controlling a communication device or client device (e.g. printer, PDS, or wireless/cellular telephone) (Fig. 3, 304) that exchanges data with a target communication terminal or remote device (e.g. a laptop) (Fig. 3, 302) over a

radio network or wireless personal area network (WPAN) (Fig. 3, 300) (section 0017, line 1 - section 0019, line 12) when establishing a new radio communication connection between the communication device and a target communication terminal, the communication device having a memory (Fig. 3, 310) for storing various types of data (0026, line 1 – section 0027, line 14; section 0029, lines 1-14), the method comprising: judging whether predetermined connection discriminating conditions are satisfied by repeating a target communication terminal discovery process before performing the predetermined functions (section 0030, line 1 – section 0036, line 8; section 0039, lines 16-20); and performing the predetermined functions through the radio communication connection by extracting required service information or service channel number (Fig. 3, 322) from memory to perform the predetermined functions between the communication device and the target communication terminal, the required service information is stored in the memory by executing the predetermined functions with the target communication when the predetermined connection conditions are satisfied (0026, line 1 – section 0027, line 14; section 0037, lines 1-16).

Regarding claim 10, Sanjeev discloses a method for controlling a communication device or client device (e.g. printer, PDS, or wireless/cellular telephone) (Fig. 3, 304) that exchanges data with a target communication terminal or remote device (e.g. a laptop) (Fig. 3, 302) over a network or wireless personal area network (WPAN) (Fig. 3, 300) (section 0017, line 1 - section 0019, line 12), when disconnecting a radio communication connection established between the communication device and a target communication terminal (section 0037, lines 16-24), the communication device having a memory (Fig. 3, 310) for storing various types of data (0026, line 1 – section 0027, line 14; section 0029, lines 1-14), the method comprising: judging whether

disconnection conditions are satisfied by repeating a target communication terminal connection process; and invalidating predetermined functions corresponding to executed service information that is stored in memory so that the predetermined functions between the communication device and the target communication terminal can be performed when the disconnection discriminating conditions are satisfied (section 0037, line 16 – section 0039, line 20).

Regarding claim 11, Sanjeev discloses a method for controlling a communication device or client device (e.g. printer, PDS, or wireless/cellular telephone) (Fig. 3, 304) that exchanges data with target communication terminal or remote device (e.g. a laptop) (Fig. 3, 302) over a network or wireless personal area network (WPAN) (Fig. 3, 300) (section 0017, line 1 - section 0019, line 12), the communication device having a memory mechanism (Fig. 3, 310) for storing various types of data (0026, line 1 – section 0027, line 14; section 0029, lines 1-14), the method comprising: judging whether a radio communication connection between the communication device and a target communication terminal is in a connection status or in a disconnection status, based on communication controlling information that defines conditions for discriminating between a new radio communication connection established between the communication device and a new target communication terminal, or a disconnection of radio communication connection established between the communication device and the target communication terminal, and performing radio communications with the target communication terminal by using service information that executes the predetermined functions between the communication device and the target communication terminal, the service information being stored in memory based on discrimination result (section 0037, line 1 – section 0039, line 20).

Regarding claim 12, Sanjeev discloses a method for controlling a communication device or client device (e.g. printer, PDS, or wireless/cellular telephone) (Fig. 3, 304) that exchanges data with a target communication terminal or remote device (e.g. a laptop) (Fig. 3, 302) over a network or wireless personal area network (WPAN) (Fig. 3, 300) (section 0017, line 1 - section 0019, line 12), the communication device having a memory (Fig. 3, 310) for storing various types of data (0026, line 1 – section 0027, line 14; section 0029, lines 1-14), the method comprising: storing, in memory (Fig. 3, 310), designated communication control information that defines discriminating conditions for discriminating between establishing a new radio communication connection between the communication device and a target communication terminal, or disconnecting a radio communication connection established between the communication device and the target communication terminal; judging whether the radio communication connection between the communication device and the target communication terminal is in a connection state or a disconnection state based on the designated communication control information; and performing radio communication with the target communication terminal by using service information that executes the predetermined functions between the communication device and the target communication terminal, the service information being stored in memory based on a discrimination result (section 0030, line 1 – section 0036, line 8; section 0037, line 1 – section 0039, line 20).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- U.S. Patent Application Publication No. US 2002/0051184 by Fritz et al disclose a radio communication device communicating with a target communication terminal on a network and determining connection and disconnection status between said device and said terminal

10. Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:

(703) 872-9306 (for formal communications intended for entry)

Or call:

(571) 272-2600 (for customer service assistance)

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Hashem whose telephone number is (571) 272-7542. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LH
lh
May 12, 2005



FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600